

FCC MAIL SECTION
Before the
Federal Communications Commission
Washington, D.C. 20554

JUN 2 9 20 AM '93

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ET Docket No. 92-165

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In the Matter of

Revision of Part 15
of the Rules to Expand
the Restricted Bands of
Operation

REPORT AND ORDER

Adopted: May 13, 1993;

Released: June 1, 1993

By the Commission:

INTRODUCTION

1. By this action, the Commission amends Part 15 of its rules to prohibit the operation of low power, non-licensed radio transmitters and to limit spurious emissions from such devices within the frequency bands that have been authorized for the Global Maritime Distress and Safety System (GMDSS).

BACKGROUND

2. The Commission's rules restrict Part 15 low power, non-licensed radio frequency (RF) transmitters, i.e. intentional radiators, from operating in certain frequency bands.¹ These "restricted bands" were established to protect against interference to services involving safety-of-life and services that use very low received signal levels. The GMDSS is an international automated maritime distress alerting system that relies on satellite and advanced terrestrial systems. The GMDSS is used for worldwide safety alerts, coordinated search and rescue operations and the dissemination of maritime safety information. On January

16, 1992, the Commission adopted a *Report and Order* incorporating GMDSS requirements into its Maritime Services Rules.²

3. The GMDSS frequency bands are used for safety-of-life purposes and, therefore, meet the criteria for protection as restricted frequency bands under Part 15. In addition, the international Radio Regulations require that transmissions on the GMDSS bands be protected from other interfering sources of radio frequency emissions.³ In view of the potential for low power, non-licensed transmitters to interfere with GMDSS operations on these bands, the Commission adopted a *Notice of Proposed Rule Making (Notice)* proposing to expand the Part 15 restricted bands to include the ship-to-shore GMDSS frequencies required to be protected by the international Radio Regulations.⁴ The Commission also proposed to reduce the width of the existing restricted frequency band of 490-510 kHz to 495-505 kHz, effective February 1, 1999.⁵

4. The United States Coast Guard was the only party to file comments in response to the *Notice*. The Coast Guard asks that ten additional restricted bands be added to protect shore-to-ship GMDSS communications.⁶ The Coast Guard suggests that Part 15 intentional radiators that may operate on these bands, such as security alarm, data, and computer communications systems, are likely to proliferate on vessels. According to the Coast Guard, this could result in harmful interference that could only delay or prevent the reception of a distress alert relay.

DISCUSSION

5. The proposed new restricted bands were limited to the GMDSS bands requiring protection under international radio regulations. In developing that proposal, we considered including additional GMDSS-related frequencies in the Part 15 restricted bands. However, we believed that to do so would unnecessarily restrict Part 15 intentional radiators from frequencies on which there is little likelihood of interference. We would not expect Part 15 intentional radiators, such as security alarms, to be commonly used on ships. Furthermore, we note that the Captain of a vessel may restrict or prohibit the operation of any transmitter on board, including Part 15 intentional radiators. Accordingly, we conclude that the shore-to-ship frequencies should not be added to the restricted bands in Section 15.205.⁷

¹ See 47 CFR Section 15.205. Part 15 transmitters may not operate within the restricted frequency bands. Spurious emissions falling within the restricted frequency bands must not exceed the general radiated emission limits in 47 CFR Section 15.209.

² See *Report and Order*, PR Docket No 90-480, 7 FCC Rcd 951 (1992).

³ See ITU Radio Regulations, RRN38-11, Section 44, N 3067 Mob-87, 1990. As stated therein, any emission capable of causing harmful interference to transmissions on certain GMDSS frequency bands used for distress, alarm, urgency or safety communications is prohibited. For other GMDSS frequency bands, the ITU regulations state only that emissions causing harmful interference are prohibited.

⁴ See *Notice of Proposed Rule Making* in ET Docket No. 92-165, adopted July 22, 1992, 7 FCC Rcd 5174 (1992). Specifically, we proposed to add the following restricted bands: 4123.5-4126.5 kHz, 4177.25-4177.75 kHz, 4207.25-4207.75 kHz, 6213.5-6216.5 kHz, 6267.75-6268.25 kHz, 6311.75-6312.25 kHz,

8289.5-8292.5 kHz, 8376.25-8386.75 kHz, 8414.25-8414.75 kHz, 12.2885-12.2915 kHz, 12.51975-12.52025 MHz, 12.57675-12.57725 MHz, 16.4185-16.4215 MHz, 16.69475-16.69525 MHz, 16.80425-16.80475 MHz, 156.52475-156.52525 MHz, and 1645.5-1646.5 MHz.

⁵ This restricted band provides interference protection to the maritime distress frequency 500 KHz. The guard bands for that frequency are scheduled to be reduced when the GMDSS is fully implemented on February 1, 1999. See 47 CFR 2.106 Footnote 471.

⁶ The Coast Guard request that the following frequencies be added: 517.75-518.25 kHz, 4209.25-4209.75 kHz, 4209.75-4210.25 kHz, 6313.75-6314.25 kHz, 8416.25-8416.75 kHz, 1.257875-1.257925 MHz, 1.680625-1.680675 MHz, 1.968025-1.968075 MHz, 2.237575-2.237625 MHz, 2.610025-2.610075 MHz.

⁷ The Coast Guard, in its comments, points out that five frequency bands that involve the use of single-sideband communications were incorrectly specified in the *Notice*. The proposed frequency bands were: 4123.5-4126.5 kHz, 6213.5-6216.5 kHz,

6. We believe that the addition of the proposed new restricted frequency bands will have little, if any, impact on manufacturers of Part 15 transmitters. These frequencies do not appear to be in use by any current Part 15 devices. We note the absence of any comments or objections from equipment manufacturers. We observe that the addition of these restricted frequency bands will further ensure the reliability of the GMDSS. Therefore, we find that the new restricted frequency bands are in the public interest and we are amending Section 15.205 of our rules accordingly.

PROCEDURAL MATTERS

7. *Final Regulatory Analysis.* Pursuant to the Regulatory Flexibility Act of 1980, the Commission's final Analysis is as follows:

I. Need and purpose of this action:

The rule changes adopted in this Report and Order are needed to protect frequency bands used by the Global Maritime Distress and Safety System (GMDSS) from harmful interference, in accordance with international Radio Regulations.

II. Summary of the issues raised by the public comments in response to the Initial Regulatory Flexible Analysis:

There were no comments submitted in response to the Initial Regulatory Flexible Analysis.

III. Significant alternatives considered:

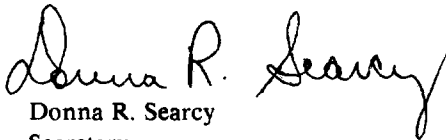
The Commission has considered the alternatives presented in this proceeding and has adopted standards that do not unduly burden the industry, but still provide adequate protection to the GMDSS frequencies.

ORDERING CLAUSES

8. Accordingly, IT IS ORDERED that pursuant to the authority contained in Sections 4(i) and 303(r) of the Communications Act of 1934, as amended, Part 15 of the Commissions Rules and Regulations IS AMENDED as set forth in the Appendix below. These Rules and Regulations are effective [30 days after publication in the Federal Register], IT IS FURTHER ORDERED THAT this proceeding IS TERMINATED.

9. For further information on this proceeding, contact Errol Chang, Technical Standards Branch, Office of Engineering and Technology, telephone 202-653-7316.

FEDERAL COMMUNICATIONS COMMISSION


Donna R. Searcy
Secretary

APPENDIX

Title 47 of the Code of Federal Regulations, Part 15 is amended as follows:

Part 15 - Radio frequency devices

1. The authority citation for Part 15 continues to read as follows:

AUTHORITY: Sections 4, 302, 303, 304, and 307 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154, 302, 303, 304, and 307.

2. Section 15.205 is amended by revising paragraph (a) to read as follows:

Section 15.205 Restricted bands of operation.

(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.25
0.495 - 0.505 ¹	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	Above 38.6
13.36 - 13.41			

¹ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

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